

**Iowa Department of Natural Resources
Environmental Protection Commission**

ITEM

☐

DECISION

TOPIC

**Notice of Intended Action: Chapters 20, 21, 22, 23, 25, and 33, Air Quality
Program Rules - Updates, Revisions, and Additions**

The Department is requesting permission from the Commission to proceed with the rulemaking process and publish a Notice of Intended Action to amend Chapter 20 "Scope of Title – Definitions-Forms-Rules of Practice," Chapter 21 "Compliance," Chapter 22 "Controlling Pollution," Chapter 23 "Emission Standards for Contaminants," Chapter 25 "Measurement of Emissions," and Chapter 33, "Special Regulations and Construction Permit Requirements for Major Stationary Sources – Prevention of Significant Deterioration (PSD) of Air Quality," of the 567 Iowa Administrative Code.

The purpose of the proposed rule changes is to update state air quality rules for new state and federal requirements enacted within the last year. The proposed rule changes also include corrections, clarifications and improvements to existing air quality rules, including the rules for construction permits; prevention of fugitive dust; and the opacity limit for incinerators.

This Notice of Intended Action was presented to the Commission last month in an information item. Changes from what was presented last month include the additions of Item 4, Item 6 and Item 12, and a better description in the preamble for the amendments in Item 16.*

The items included in the Notice of Intended Action are as follows:

Definitions update

Item 1 amends three definitions in Chapter 20. The definitions of "ATSM" and "ASME" are amended to delete obsolete and unneeded addresses. The definition of "volatile organic compound" is updated to reflect recent EPA amendments. EPA deleted a chemical from the list of the substances considered to be volatile organic compounds. Item 25 similarly amends the PSD definition of "volatile organic compounds" or "VOC" in Chapter 33.

Greenhouse gas requirements

The Iowa General Assembly approved legislation in April 2007 that requires the reporting of greenhouse gas emissions in air construction permit applications and also requires a statewide greenhouse gas emission inventory.

Item 2 of the attached Notice adds the greenhouse gas definition from the legislation (Senate File 485) to Chapter 20. Item 3 amends the emissions inventory rule in Chapter 21 to incorporate the requirements for reporting greenhouse gases.

The Department updated the air construction permit application forms to facilitate the reporting of greenhouse gas emissions in air construction permit applications. The Department will continue to work over the next several months to establish the method of inventorying greenhouse gases and to establish a voluntary greenhouse gas registry, as required by the legislation.

Construction Permits

- Item 4* adds clarifying language to the construction permit exemption for internal combustion engines. Equipment qualifying for this exemption may be subject to New Source Performance Standards (NSPS) for stationary compression ignition internal combustion engines. Use of this exemption does not alleviate the owner or operator of the obligation to comply with the NSPS requirements.
- Item 5 corrects an error in the provisions for the exemption for "small units."
- Item 6 amends the exemption for aqueous based wash booths to clarify what processes can be included in this exemption.
- Item 7 amends the exemption for mobile agricultural and construction internal combustion engines. Over-the-road truck engines are being added to the list of equipment included under this exemption. This equipment was inadvertently excluded from this exemption in the original rulemaking.
- Item 8 amends a cross reference to the PSD rules in Chapter 33. The amendment makes clear that owners and operators of sources subject to PSD shall comply with the rules set forth in Chapter 33.

Acid Rain definitions

Item 9 updates the definition of "40 CFR Part 75" to reflect recent EPA amendments to performance test methods for the Acid Rain program.

New Source Performance Standards (NSPS)

Items 10, 11, and 12* amend state air quality rules to adopt NSPS amendments that EPA finalized within the last year. The substantial adopted federal amendments include:

- Amendments to the NSPS General Provisions to allow a facility to petition for an extension to performance testing deadlines when events beyond the facility's control prevent compliance with the testing deadline.
- Amendments to the NSPS for electrical steam generating units (EGUs) and industrial-commercial-institutional steam generating units. EPA finalized amendments to add compliance alternatives for certain sources, to revise certain recordkeeping and reporting requirements, to correct technical and editorial errors and to update the grammatical style of the four subparts that EPA amended. As such, EPA has re-written all four subparts to accommodate the amendments and the new format.
- Amendments to the NSPS for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI).* EPA originally promulgated the NSPS for SOCMI in 1983. The standard applies to pumps, compressors, pressure relief devices, valves, flanges and other equipment in VOC service at chemical process plants such as ethanol production facilities. The Clean Air Act requires that EPA periodically review the standards to reflect improvements in methods for reducing emissions. As a result of this review and the public comments received on the proposed rules, EPA finalized

amendments to the NSPS for existing SOCMIs that include clarifications, changes that reduce burden and additional compliance options. However, EPA also decided to develop new standards for new SOCMIs that commence construction, reconstruction or modification after November 7, 2006. The changes for new SOCMIs largely parallel the changes for existing SOCMIs, but also include lower leak detection levels, additional recordkeeping, and additional instrument calibration requirements.

National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Items 13 through 17 amend state air quality rules to adopt NESHAP amendments that EPA finalized within the last year. The substantial adopted federal amendments that affect facilities in Iowa include:

- Amendments to the NESHAP General Provisions in 40 CFR Parts 61 and 63, similar to the NSPS changes indicated above, to allow a facility to petition for an extension to performance testing deadlines.
- Amendments to three, related NESHAPs for surface coating of automobiles and light-duty trucks, for surface coating of miscellaneous metal parts and products, and for surface coating of plastic parts and products. EPA issued the amendments to clarify the interaction between the three NESHAPs, to correct technical errors, and to make clear that screen printing is not subject to the plastic parts NESHAP.
- Amendments to the NESHAP for halogenated solvent degreasers. These amendments were made to address EPA's evaluation of the remaining risk to public health and the environment following implementation of the original, technology based rule in 1994. EPA found that more stringent standards for major sources and for new area (minor) sources were needed to provide an ample margin of safety to protect public health. The Department expects that approximately two, existing sources in Iowa may need to make modifications to comply with the new, facility-wide HAP emissions standards. The Department will work with these and any other affected facilities to assist with compliance with the new standards.
- Amendments to the NESHAP for Portland cement manufacturing. These amendments address a federal court remand of the original standards promulgated in 1999. The amendments address control of emissions at new, major stationary sources for mercury, hydrogen chloride (HCl), total hydrocarbons (THC) and metal hazardous air pollutants (HAP). At this time, the Department is not aware of any facilities that would be subject to these emissions standards.
- Amendments to the NESHAPs to include several, new area source categories. Area sources are those sources that are not major sources for HAP. Although EPA promulgated a number of area source NESHAPs, the Department has identified only one standard, the NESHAP for area sources producing lead acid batteries, which may require one facility to install additional control and conduct emissions testing. The Department and the UNI Air Emissions Assistance Program will work with the facility to assist with the compliance requirements. The facility with need to comply with the new requirements by June 2008.

Emission limit based upon stack height - correction

Item 18 corrects a calculation in Chapter 23 that specifies how to calculate an emissions limit based upon stack height.

Fugitive dust – reasonable precautions

Item 19 amends the rule for fugitive dust to add vehicle speed control as a reasonable precaution to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions are generated. Reducing the speed of vehicles traveling on a surface has long been recognized by the Department as a reasonable method to prevent the discharge of visible fugitive dust emissions.

Incinerator opacity limit – correction

Item 20 corrects an error in the level of excess opacity allowed from incinerators during periods of operation breakdown or cleaning of control equipment.

Test methods – update state rules for emissions test methods

Items 21-24 amend Chapter 25 to update performance test methods. EPA updated test methods for the NSPS standards and for the Acid Rain rules.

**Item 4 and Item 12 were not included in the original EPC meeting agenda, and are being added for the Commission's approval on December 4, 2007.*

If the Commission approves this Notice of Intended Action, a public hearing will be held on Monday, February 4, 2008, at 1 p.m. at the Department's Air Quality Bureau offices. The public comment period for the proposed rules will close on Tuesday, February 5, 2008.

An administrative rule fiscal impact statement is attached.

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Memo date: November 13, 2007 (revised December 4, 2007)

ENVIRONMENTAL PROTECTION COMMISSION [567]

Notice of Intended Action

Pursuant to the authority of Iowa Code section 455B.133, the Environmental Protection Commission hereby gives Notice of Intended Action to amend Chapter 20 “Scope of Title-Definitions-Forms-Rules of Practice,” Chapter 21, “Compliance,” Chapter 22, “Controlling Pollution,” Chapter 23, “Emission Standards for Contaminants,” Chapter 25, “Measurement of Emissions,” and Chapter 33, "Special Regulations and Construction Permit Requirements for Major Stationary Sources—Prevention of Significant Deterioration (PSD) of Air Quality," Iowa Administrative Code.

The purpose of the proposed rule changes is to update state air quality rules for new state and federal requirements enacted within the last year. The proposed rule changes also include corrections, clarifications and improvements to existing air quality rules, including the rules for construction permits, prevention of fugitive dust, and the opacity limit for incinerators.

Item 1 amends rule 567—20.2(455B) to update the definitions for "ASME," "ASTM," and "volatile organic compound." Outdated and unnecessary addresses are deleted from "ASME" and "ASTM." The definition of "volatile organic compound" is being updated to reflect recent federal amendments. The U.S. Environmental Protection Agency (EPA) amended the definition of "volatile organic compound" or "VOC" to exclude the compound HF-7300 from the list of compounds that contribute to tropospheric ozone formation. As such, emissions of HF-7300 will no longer be counted towards VOC emissions.

Item 2 amends rule 567—20.2(455B) to add a new definition of "greenhouse gas." The Iowa General Assembly approved legislation in April 2007 that requires the reporting of greenhouse gas emissions in air construction permit applications and also requires a statewide

greenhouse gas emission inventory. This amendment adds the greenhouse gas definition from the legislation (Senate File 485).

The Department updated the air construction permit application forms to facilitate the reporting of greenhouse gas emissions in air construction permit applications. The Department also has sent out several list serve articles on the new greenhouse gas requirements, and has posted information on greenhouse gas emission factors on the Department's Air Quality Bureau website. The Department will continue to work over the next several months to establish the method of inventorying greenhouse gases and to establish a voluntary greenhouse gas registry, as required by the legislation.

Item 3 amends subrule 21.1(3) to clarify the requirement to include greenhouse gases in emissions inventories. As mentioned above for Item 2, Senate File 485 requires the reporting of greenhouse gas emissions through a greenhouse gas emission inventory requirement.

Item 4 amends paragraph 22.1(2)"r," which is the construction permit exemption for internal combustion engines with a brake horsepower rating of less than 400. The amendment makes clear that this equipment may be subject to the federal New Source Performance Standards (NSPS) for stationary compression ignition internal combustion engines specified in 40 Code of Federal Regulations (CFR) Part 60, Subpart IIII, and adopted by reference in paragraph 23.1(2)"yyy." Use of the construction permit exemption does not alleviate an owner or operator of the duty to comply with the NSPS requirements.

Item 5 amends subparagraph 22.1(2)"w"(6) to correct an error in the "small unit" exemption from construction permits. The existing subparagraph incorrectly lists the threshold for a "substantial small unit" for "any combination of hazardous air pollutants" as 9.375 tons per year. The amendment corrects the threshold to 3.75 tons per year.

Item 6 amends paragraph 22.1(2)"aa" to clarify which types of activities are included in this exemption. This exemption applies to pretreatment application processes that use aqueous based chemistries (wash booths). The amendment clarifies that this exemption applies to all pretreatment wash processes using aqueous based chemistries, and not just processes preparing a substrate for an organic coating. This amendment is within the original rulemaking's intent for this exemption, is within the scope of the original technical justification for this exemption, and does not result in any increase in emissions from these types of emission sources.

Item 7 amends paragraph 22.1(2)"nn" to add to this construction permit exemption the emissions from over-the-road truck internal combustion engines that are operated only for repair or maintenance purposes at non-major equipment repair shops or equipment dealerships. Over-the-road truck engines were inadvertently excluded from the list of mobile source equipment types included in the original rulemaking for paragraph "nn." Review of data used in the development of the technical justification for the original rulemaking for this exemption, and review of the discussions with the stakeholder workgroup members indicate that emissions from over-the-road truck engines were considered in the data reviewed by the Department and are within the engine size range (400-750 hp) used to calculate emissions for the technical justification.

Item 8 amends rule 567—22.4(455B), which contains a cross reference to the PSD rules in Chapter 33. The amendment makes clear that owners or operators of sources subject to PSD shall comply with the rules set forth in Chapter 33.

Item 9 amends rule 567—22.120(455B), the definition of "40 CFR Part 75" to adopt by reference recent changes that EPA made to the performance test methods for the Acid Rain program.

Item 10 amends subrule 23.1(2), which are the provisions adopting by reference the federal new source performance standards (NSPS) contained in 40 CFR Part 60. This amendment adopts recent federal amendments, as follows:

- Amendments to the NSPS General Provisions (Subpart A) to allow a facility to petition for an extension to performance testing deadlines when events beyond the facility's control prevent compliance with the testing deadline.
- Amendments to the NSPS for electrical steam generating units (EGUs) and industrial-commercial-institutional steam generating units. EPA finalized amendments to add compliance alternatives for certain sources, to revise certain recordkeeping and reporting requirements, to correct technical and editorial errors and to update the grammatical style of the four subparts of that EPA amendment. As such, EPA has re-written all four subparts, which includes Subparts D, Da, Db and Dc, to accommodate the amendments and the new format.
- Amendments to the NSPS for other solid waste incinerators (OSWI) (Subpart EEEE). These amendments make corrections to the averaging time for opacity (visible emissions) measurements.
- Amendments to the NSPS for equipment leaks of Volatile Organic Compounds (VOC) in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI). The federal amendments being adopted are described in Item 11. EPA also promulgated a new NSPS for equipment leaks of VOC at new petroleum refineries (Subpart GGGa) and revised the NSPS for existing petroleum facilities (Subpart GGG). However, the Department is not adopting these federal amendments because Iowa does not have any petroleum refineries, and very likely will never have any petroleum refineries.

Item 11 amends paragraph 23.1(2)"z" to delete the federal amendment date. This date is no longer needed because all federal updates to NSPS are being adopted by reference in Item 9.

Item 12 amends paragraph 23.1(2)"nn," which are the standards for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI). EPA originally promulgated the NSPS for SOCMI under Subpart VV in 1983. The standard applies to pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines (OEL), valves, flanges and other connectors in VOC service at a SOCMI facility, such as ethanol production plant, that commenced construction, reconstruction or modification after January 5, 1981.

The Clean Air Act requires that EPA periodically review the NSPS to reflect improvements in methods for reducing emissions. As a results of this review and the public comments received on the proposed federal rules, EPA finalized amendments to the NSPS for existing SOCMI (Subpart VV) that include clarifications, changes that reduce burden and additional compliance options.

However, EPA also decided to develop new standards for new SOCMI that commence construction, reconstruction or modification after November 7, 2006. The standards for new SOCMI (Subpart VVa) largely parallel the changes for existing SOCMI, but also include lower leak detection levels, additional recordkeeping, and additional instrument calibration requirements. The amendments to paragraph 23.1(2)"nn" include adoption by reference of Subpart VVa for new SOCMI.

Item 13 amends subrule 23.1(3), the emissions standards for hazardous air pollutants under 40 CFR Part 61, to adopt by reference recent EPA changes to the General Provisions

(Subpart A) for performance testing deadlines. EPA made the same changes to 40 CFR Part 61 as are described in Item 9 for 40 CFR Part 60.

Item 14 amends subrule 23.1(4), the emission standards for hazardous air pollutants for source categories, also known as NESHAP, to reflect recent changes that EPA made to 40 CFR Part 63. The federal amendments being adopted by reference include the following:

- Amendments to the NESHAP General Provisions (Subpart A) in 40 CFR Part 63, similar to the NSPS and NESHAP changes indicated in Items 9 and 11.
- Amendments to three, related surface coating NESHAP; the NESHAP for surface coating of automobiles and light-duty trucks (Subpart IIII), the NESHAP for surface coating of miscellaneous metal parts and products (Subpart MMMM) and to the NESHAP for surface coating of plastic parts and products (Subpart PPPP). EPA issued the amendments to clarify the interactions between the three NESHAPs, to correct technical errors, and to make clear that screen printing is not subject to the plastic parts NESHAP.
- Amendments to the NESHAP for halogenated solvent degreasers (Subpart T). These amendments were made to address EPA's evaluation of the remaining risk to public health and the environment following implementation of the original, technology based rule in 1994. EPA found that more stringent standards for major sources and for new area (minor) sources were needed to provide an ample margin of safety to protect public health. The Department estimates that two, existing sources in Iowa will need to make modifications to comply with the new, facility-wide HAP emissions standards. The Department will work with these and any other, affected facilities to assist with compliance with the new standards.

- Amendments to two of the NESHAP for synthetic organic chemical manufacturing (SOCMI) (Subparts F and G). EPA evaluated the residual risk for this technology based standard for the SOCMI NESHAP, and found that no further controls were necessary to provide an ample margin of safety to protect public health. EPA did, however, make minor updates and technical amendments to Subparts F and G.
- Amendments to the NESHAP for Portland cement manufacturing (Subpart LLLL). These amendments address a federal court remand of the original standards promulgated in 1999. The amendments address control of emissions at new, major stationary sources for mercury, hydrogen chloride (HCl), total hydrocarbons (THC) and metal hazardous air pollutants (HAP). At this time, the Department is not aware of any facilities that would be subject to these emissions standards.

Item 15 amends paragraph 23.1(4)"be" to deleted the federal amendment date. This date is no longer needed because the recent federal amendments to 40 CFR Part 63 are included in Item 12.

Item 16 amends subrule 23.1(4) to add and reserve new paragraphs "du" through "ek." This amendment preserves the same organizational format between federal NESHAP in 40 CFR Part 63 and the state adoption of NESHAP in subrule 23.1(4).

EPA has reserved Subparts UUUUU through CCCCCC as placeholders, and also for area source standards that EPA has not yet finalized. Paragraphs "du" through "ec" correspond to these federally reserved subparts. Further, EPA promulgated four area source standards that the Department is not adopting by reference. The federal standards not being adopted are for 1) polyvinyl chloride and co-polymer production (Subpart DDDDDD); 2) primary copper smelting (Subpart EEEEE); 3) secondary copper smelting (Subpart FFFFFF); and 4) primary nonferrous

metal smelting – zinc, cadmium and beryllium (Subpart GGGGGG). The Department is not adopting these four NESHAP because Iowa does not have, and likely will not have, any facilities subject to these standards. Paragraphs "ed" through "eg" correspond to the federal subparts that the Department is not adopting.

EPA has yet not promulgated final NESHAP standards corresponding to Subparts HHHHHH through KKKKKK. EPA has proposed a standard for Subpart HHHHHH, which is the area source NESHAP for paint stripping and miscellaneous surface coating operations. EPA expects to promulgate the final standards for Subpart HHHHHH by the end of the year. EPA has not yet proposed any standards corresponding to subparts IIIIII through KKKKKK. The amendments to state rules reserve paragraphs "eh" through "ek" to correspond with these federally reserved subparts.

Item 17 amends subrule 23.1(4) to add new paragraphs "el" through "eq." This amendment adopts by reference several new area source NESHAP that EPA promulgated in July 2007. Area sources are those new and existing sources that are not major sources for hazardous air pollutants (HAP). The Department is adopting the area source NESHAP for several area source categories, including acrylic and modacrylic fiber production, carbon black production, chemical manufacturing of chromium compounds, flexible polyurethane foam production and fabrication, lead acid battery manufacturing, and wood preserving. However, at this time, the Department has identified only one area source NESHAP standard, lead acid battery manufacturing, which may require one facility to install additional control and conduct emissions testing. The Department and the University of Northern Iowa Air Emissions Assistance Program will work with the facility to assist with the compliance requirements. The facility will need to comply with the new standards by June 2008.

Item 18 amends subparagraph 23.1(6)"a"(2), which includes a calculation for determining an emission limit based upon stack height. The amendment updates a reference to the federal provisions under 40 CFR 52.21, and also corrects the symbol for "good engineering practice stack height." This amendment corrects the symbol for "good engineering practice stack height" from "H_g" to the correct, subscript form, "H_g."

Item 19 amends subparagraph 23.3(2)"c"(1), which are the provisions for prevention of fugitive dust, to add numbered paragraph "6." The amendments adds vehicle speed control as a reasonable precaution to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions are generated. The amount of fugitive dust generated from a road or other surface used for vehicle movement is greatly influenced by the speed of a vehicle on the surface. Reducing the speed of vehicles traveling on a surface has long been recognized by the Department as a reasonable method to prevent the discharge of visible fugitive dust emissions.

Item 20 amends subrule 23.4(12) to make corrections to the emission limits for incinerators. The visible emissions (opacity) limit for incinerators is 40%. The current rules are intended to allow incinerators to emit up to 60% opacity in the case of an operation breakdown or the cleaning of control equipment for specified periods of time without being in violation. However, this provision contains an error stating that incinerators may emit opacity in excess of 60% during these times. The amendment corrects this error to specify that incinerators may emit above 40 % opacity but no more than 60% opacity during periods of operation breakdown or during the cleaning of control equipment.

Items 21 through 24 amend subrule 25.1(9), paragraph 25.1(10)"a," subrule 25.1(12) and rule 567—25.2(455B), respectively to adopt by reference recent EPA technical amendments to

performance test methods for NSPS (40 CFR Part 60) and the Acid Rain program (40 CFR Part 75).

Item 25 amends subrule 33.3(1) to amend the PSD program definition for "volatile organic compound" or "VOC." EPA amended the federal definition as explained in Item 1.

Any person may make written suggestions or comments on the proposed amendments on or before February 5, 2008. Written comments should be directed to Christine Paulson, Department of Natural Resources, Air Quality Bureau, 7900 Hickman Road, Suite 1, Urbandale, Iowa, 50322, fax (515) 242-5094, or by electronic mail to christine.paulson@dnr.state.ia.us.

A public hearing will be held on Monday, February 4, 2008, at 1:00 PM in the conference rooms at the department's Air Quality Bureau office located at 7900 Hickman Road, Urbandale, Iowa. All comments must be received no later than Tuesday, February 5, 2008.

Any person who intends to attend the informational meeting or public hearing and has special requirements such as those related to hearing or mobility impairments should contact Christine Paulson at (515) 242-5154 to advise of any specific needs.

These amendments are intended to implement Iowa Code sections 455B.131, 455B.133, and 455B.152.

The following amendments are proposed.

ITEM 1. Amend rule **567—20.2(455B)**, the definitions of "ASME," "ASTM" and "Volatile Organic Compound" as follows:

"ASME" means the American Society of Mechanical Engineers, ~~345 East 47th Street, New York, New York 11017.~~

"ASTM" means the American Society for Testing and Materials, ~~1916 Race Street, Philadelphia, Pennsylvania 19103.~~

“Volatile organic compound” means any compound included in the definition of volatile organic compound found at 40 CFR Section 51.100(s) as amended through ~~November 29, 2004~~January 18, 2007.

ITEM 2. Amend rule **567—20.2(455B)** to adopt the following new definition in alphabetical order as follows:

"Greenhouse gas" means carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

ITEM 3. Amend subrule 21.1(3) as follows:

21.1(3) Emissions inventory. The person responsible for equipment as defined herein shall provide information on fuel use, materials processed, air contaminants emitted (including greenhouse gases, as “greenhouse gas” is defined in rule 567—20.2(455B)), estimated rate of emissions, periods of emissions or other air pollution information to the director upon the director’s written request for use in compiling and maintaining an emissions inventory for evaluation of the air pollution situation in the state and its various parts. The information requested shall be submitted on forms supplied by the department. All information in regard to both actual and allowable emissions shall be public records and any publication of such data shall be limited to actual and allowable air contaminant emissions.

ITEM 4. Amend subparagraph **22.1(2)“r”** as follows:

r. An internal combustion engine with a brake horsepower rating of less than 400 measured at the shaft. For the purposes of this exemption, the manufacturer’s nameplate rating at full load shall be defined as the brake horsepower output at the shaft. An internal combustion may be subject to the New Source Performance Standards (NSPS) for stationary compression

ignition internal combustion engines set forth in 40 CFR Part 60, Subpart IIII, as adopted by reference in 23.1(2)"yyy." Use of this exemption does not alleviate an owner or operator from any obligation to comply with the NSPS requirements.

ITEM 5. Amend subparagraph **22.1(2)“w”(6)**, numbered paragraph **"8,"** as follows:

(6) For the purposes of this paragraph, “substantial small unit” means a small unit which emits more than the following amounts, as documented in the exemption justification document:

1. 30 pounds per year of lead and lead compounds expressed as lead;
2. 3.75 tons per year of sulfur dioxide;
3. 3.75 tons per year of nitrogen oxides;
4. 3.75 tons per year of volatile organic compounds;
5. 3.75 tons per year of carbon monoxide;
6. 3.75 tons per year of particulate matter (particulate matter as defined in 40 CFR Part 51.100(pp));
7. 1.875 tons per year of PM10; or
8. 3.75 tons per year of any hazardous air pollutant or ~~9.375~~3.75 tons per year of any combination of hazardous air pollutants.

An emission unit is a “substantial small unit” only for those substances for which annual emissions exceed the above-indicated amounts.

ITEM 6. Amend paragraph **22.1(2)"aa,"** as follows:

aa. Pretreatment application processes that use aqueous-based chemistries designed to ~~prepare a substrate for an organic coating~~ clean a substrate, provided that the chemical concentrate contains no more than 5 percent organic solvents by weight. This exemption includes pretreatment processes that use aqueous based cleaners, cleaner-phosphatizers, and phosphate conversion coating chemistries.

ITEM 7. Amend paragraph **22.1(2)“nn”**, as follows:

nn. Emissions from mobile over-the-road trucks, and mobile agricultural and construction internal combustion engines that are operated only for repair or maintenance purposes at equipment repair shops or equipment dealerships, and only when the repair shops or equipment dealerships are not major sources as defined in rule 567—22.100(455B).

ITEM 8. Amend rule 567—22.4(455B) as follows:

567—22.4(455B) Special requirements for major stationary sources located in areas designated attainment or unclassified (PSD). ~~The~~ As applicable, the owner or operator of a stationary source shall comply with the rules for prevention of significant deterioration (PSD) ~~are contained as set forth in 567—Chapter 33.~~

ITEM 9. Amend rule 567—22.120(455B), definition of "40 CFR Part 75," as follows:

“40 CFR Part 75,” or any cited provision therein, shall mean 40 Code of Federal Regulations Part 75, or the cited provision therein, as amended through ~~May 18, 2005~~ September 28, 2007.

ITEM 10. Amend subrule **23.1(2)** as follows:

23.1(2) New source performance standards. The federal standards of performance for new stationary sources, as defined in 40 Code of Federal Regulations Part 60 as amended or corrected

through ~~September 21, 2006~~, November 16, 2007, are adopted by reference, except § 60.530 through § 60.539b (Part 60, Subpart AAA), and shall apply to the following affected facilities. The corresponding 40 CFR Part 60 subpart designation is in parentheses. Reference test methods (Appendix A), performance specifications (Appendix B), determination of emission rate change (Appendix C), quality assurance procedures (Appendix F) and the general provisions (Subpart A) of 40 CFR Part 60 also apply to the affected facilities.

ITEM 11. Amend paragraph **23.1(2)"z"** as follows:

z. Electric utility steam generating units. An electric utility steam generating unit that is capable of combusting more than 250 million Btus per hour (73 megawatts) heat input of fossil fuel for which construction or modification or reconstruction is commenced after September 18, 1978, or an electric utility combined cycle gas turbine that is capable of combusting more than 250 million Btus per hour (73 megawatts) heat input. An electric utility steam generating unit is any fossil fuel-fired combustion unit of more than 25 megawatts electric (MW) that serves a generator that produces electricity for sale. A unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 MW output to any utility power distribution system for sale is also an electric utility steam generating unit. This standard also includes a provision for mercury emissions for any coal-fired electric utility steam generating unit other than an integrated gasification combined cycle electric steam generating unit, for which construction or reconstruction commenced after January 30, 2004. (Subpart Da as amended through ~~June 9, 2006~~)

ITEM 12. Amend paragraph **23.1(2)"nn"** as follows:

nn. Equipment leaks of ~~VOC~~ volatile organic compounds in the synthetic organic chemicals manufacturing industry. Standards for affected facilities in the synthetic organic chemicals manufacturing industry (SOCMI) that commenced construction, reconstruction, or modification after January 5, 1981, and on or before November 7, 2006 are set forth in Subpart VV. Standards for affected SOCMI facilities that commenced construction, reconstruction or modification after November 7, 2006, are set forth in Subpart VVa. ~~Any~~ The standards apply to pumps, compressors, pressure relief devices, sampling systems, ~~valves and lines~~ open-ended valves or lines (OEL), valves, and flanges or other connectors which handle volatile organic compounds (VOC). (Subpart VV and Subpart VVa)

ITEM 13. Amend subrule **23.1(3)** as follows:

23.1(3) Emission standards for hazardous air pollutants. The federal standards for emissions of hazardous air pollutants, 40 Code of Federal Regulations Part 61 as amended or corrected through ~~July 20, 2004,~~ May 16, 2007, and 40 CFR Part 503 as adopted on August 4, 1999, are adopted by reference, except 40 CFR §61.20 to §61.26, §61.90 to §61.97, §61.100 to §61.108, §61.120 to §61.127, §61.190 to §61.193, §61.200 to §61.205, §61.220 to §61.225, and §61.250 to §61.256, and shall apply to the following affected pollutants and facilities and activities listed below. The corresponding 40 CFR Part 61 subpart designation is in parentheses. Reference test methods (Appendix B), compliance status information requirements (Appendix A), quality assurance procedures (Appendix C) and the general provisions (Subpart A) of Part 61 also apply to the affected activities or facilities.

ITEM 14. Amend subrule 23.1(4), introductory paragraph, as follows:

23.1(4) Emission standards for hazardous air pollutants for source categories. The federal standards for emissions of hazardous air pollutants for source categories, 40 Code of

Federal Regulations Part 63 as amended or corrected through ~~October 25, 2006~~, July 16, 2007, are adopted by reference, except those provisions which cannot be delegated to the states. The corresponding 40 CFR Part 63 subpart designation is in parentheses. 40 CFR Part 63, Subpart B, incorporates the requirements of Clean Air Act Sections 112(g) and 112(j) and does not adopt standards for a specific affected facility. Test methods (Appendix A), sources defined for early reduction provisions (Appendix B), and determination of the fraction biodegraded (F_{bio}) in the biological treatment unit (Appendix C) of Part 63 also apply to the affected activities or facilities. For the purpose of this subrule, “hazardous air pollutant” has the same meaning found in 567—22.100(455B). For the purposes of this subrule, a “major source” means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless a lesser quantity is established, or in the case of radionuclides, where different criteria are employed. For the purposes of this subrule, an “area source” means any stationary source of hazardous air pollutants that is not a “major source” as defined in this subrule. Paragraph 23.1(4)“a,” general provisions (Subpart A) of Part 63, shall apply to owners or operators who are subject to subsequent subparts of 40 CFR Part 63 (except when otherwise specified in a particular subpart or in a relevant standard) as adopted by reference below. The provisions of 40 CFR Part 60, Subparts A, B, Da, and HHHH for the Clean Air Mercury Rule (CAMR), are found at subrules 23.1(2) and 23.1(5) and in 567—Chapter 34.

ITEM 15. Amend paragraph **23.1(4)“be”** as follows:

be. Emission standards for hazardous air pollutants from hazardous waste combustors.

These standards apply to all hazardous waste combustors: hazardous waste incinerators,

hazardous waste burning cement kilns, hazardous waste burning lightweight aggregate kilns, hazardous waste solid fuel boilers, hazardous waste liquid fuel boilers, and hazardous waste hydrochloric acid production furnaces, except as specified in Subpart EEE. Both area sources and major sources are subject to this subpart as of April 19, 1996, and are subject to the requirement to apply for and obtain a Title V permit. (Part 63, Subpart EEE, ~~as amended through October 25, 2006~~)

ITEM 16. Amend subrule 23.1(4) to add and reserve the following **new** paragraphs:

du. through **ek.** Reserved

ITEM 17. Amend subrule 23.1(4) to add the following **new** paragraphs, in alphabetical order:

el. Emissions standards for hazardous air pollutants for acrylic and modacrylic fibers production area sources. This standard applies to acrylic or a modacrylic fibers production plants that are area sources for hazardous air pollutant emissions. (Part 63, Subpart LLLLLL)

em. Emissions standards for hazardous air pollutants for carbon black production area sources. This standard applies to carbon black production plants that are area sources for hazardous air pollutants. (Part 63, Subpart MMMMMM)

en. Emissions standards for hazardous air pollutants for chemical manufacturing-chromium compounds area sources. This standard applied to plants that produce chromium compounds and are area sources for hazardous air pollutants. (Part 63, Subpart NNNNNN)

eo. Emissions standards for hazardous air pollutants for flexible polyurethane foam production and fabrication area sources. This standard applies to plants that produce flexible polyurethane foam or rebond foam, and plants that fabricate polyurethane foam, that are area sources for hazardous air pollutants. This standard applies to both new and existing area sources.

An affected source is existing if construction or reconstruction commenced on or before April 4, 2007. An affected source is new if construction or reconstruction commenced after April 4, 2007. (Part 63, Subpart OOOOOO)

ep. Emissions standards for hazardous air pollutants for lead acid battery manufacturing area sources. This standard applies to lead acid battery manufacturing plants that are area sources for hazardous air pollutants. Affected sources include all grid casting facilities, paste mixing facilities, three-process operation facilities, lead oxide manufacturing facilities, lead reclamation facilities, and any other lead-emitting operation that is associated with a lead acid manufacturing plant. This standard applies to both new and existing area sources. An affected source is existing if construction or reconstruction commenced on or before April 4, 2007. An affected source is new if construction or reconstruction commenced after April 4, 2007. (Part 63, Subpart PPPPPP)

eq. Emissions standards for hazardous air pollutants for wood preserving area sources. This standard applies to wood preserving operations that are area sources for hazardous air pollutants. This standard applies to both new and existing area sources. An affected source is existing if construction or reconstruction commenced on or before April 4, 2007. An affected source is new if construction or reconstruction commenced after April 4, 2007. (Part 63, Subpart QQQQQQ)

ITEM 18. Amend subparagraph **23.1(6)"a"(2)** as follows:

(2) For stacks in existence on January 12, 1979, and for which the owner and operator had obtained all applicable permits or approvals required under 567—Chapter 22 and 40 CFR § 52.21 as amended through ~~March 12, 1996~~June 13, 2007,

$$\text{HgH}_g = 2.5\text{H}$$

provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;

For all other stacks,

$$H_g = H + 1.5L$$

where:

H_g = good engineering practice stack height, measured from the ground level elevation at the base of the stack,

H = height of nearby structure(s) measured from the ground level elevation at the base of the stack,

L = lesser dimension, height or projected width, of nearby structure(s), provided that the department may require the use of a field study or fluid model to verify GEP stack height for the source; or

ITEM 19. Amend subparagraph **23.3(2)"c"(1)** to add numbered paragraph **"6"** as follows:

(1) Attainment and unclassified areas. A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public

highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.

2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.

3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.

4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.

5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.

6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

ITEM 20. Amend subrule **23.4(12)** as follows:

23.4(12)* Incinerators. No person shall cause, allow or permit the operation of an incinerator unless provided with appropriate control of emissions of particulate matter and visible air contaminants.

*Introductory paragraph, effective July 1, 1978

a. Particulate matter. ~~No~~A person shall not cause, allow or permit the operation of an incinerator with a rated refuse burning capacity of 1000 or more pounds per hour in a manner such that the particulate matter discharged to the atmosphere exceeds 0.2 grain per standard cubic foot of exhaust gas adjusted to 12 percent carbon dioxide.

~~No~~A person shall not cause, allow or permit the operation of an incinerator with a rated refuse burning capacity of less than 1000 pounds per hour in a manner such that the particulate matter discharged to the atmosphere exceeds 0.35 grain per standard cubic foot of exhaust gas adjusted to 12 percent carbon dioxide.

b. Visible emissions. ~~No~~A person shall not allow, cause or permit the operation of an incinerator in a manner such that it produces visible air contaminants in excess of 40 percent opacity; except that visible air contaminants in excess of 40 percent opacity but less than or equal to 60 percent opacity may be emitted for ~~a period or period~~periods aggregating not more than 3 minutes in any 60-minute period during an operation breakdown or during the cleaning of air pollution control equipment.

ITEM 21. Amend subrule 25.1(9) as follows:

25.1(9) Methods and procedures. Stack sampling and associated analytical methods used to evaluate compliance with emission limitations of 567—Chapter 23 or a permit condition are those specified in the “Compliance Sampling Manual”* adopted by the commission on May 19, 1977, as revised through January 30, 2003. Sampling methods, analytical determinations,

minimum performance specifications and quality assurance procedures for performance evaluations of continuous monitoring systems are those found in Appendices A (as amended through ~~October 17, 2000~~September 28, 2007), B (as amended through ~~September 21, 2006~~September 28, 2007) and F (as amended through January 12, 2004) of 40 CFR Part 60, and Appendices A (as amended through May 18, 2005), B (as amended through May 18, 2005), F (as amended through May 18, 2005) and K (as amended through ~~May 18, 2005~~September 28, 2007) of 40 CFR Part 75.

*Available from the department.

ITEM 22. Amend paragraph **25.1(10)“a”** as follows:

a. An affected source is subject to a new source performance standard promulgated in 40 CFR Part 60 as amended through ~~September 21, 2006~~September 28, 2007.

ITEM 23. Amend subrule **25.1(12)** as follows:

25.1(12) Continuous monitoring of sulfur dioxide from emission points involved in an alternative emission control program. The owner or operator of any facility applying for an alternative emission control program under 567—subrule 567—22.7(1) that involves the trade-off of sulfur dioxide emissions shall install, calibrate, maintain and operate continuous sulfur dioxide monitoring equipment consistent with EPA reference methods (40 CFR Part 60, Appendix B, as amended through ~~December 15, 1994~~September 28, 2007). The equipment shall be operational within three months of EPA approval of an alternative emission control program.

ITEM 24. Amend rule 567—25.2(455B) as follows:

567—25.2(455B) Continuous emission monitoring under the acid rain program. The continuous emission monitoring requirements for affected units under the acid rain program as

provided in 40 CFR Part 75, including Appendices A, B, F and K as amended through ~~May 18, 2005~~September 28, 2007, are adopted by reference.

ITEM 25. Amend subrule **33.3(1)**, the definition of "volatile organic compounds" or "VOC," as follows:

"Volatile organic compounds" or "VOC means any compound included in the definition of "volatile organic compounds" found at 40 CFR 51.100(s) as amended through ~~November 29, 2004~~January 18, 2007.

Date

Richard A. Leopold, Director

Administrative Rule Fiscal Impact Statement

Date: November 13, 2007

Agency: Department of Natural Resources

IAC Citation: 567 IAC 20.2, 21.1(3), 22.1(2)"r," 22.1(2)"w"(6), 22.1(2)"aa," 22.1(2)"nn," 22.4, 23.1(2), 23.1(2)"z," 23.1(2)"nn," 23.1(3), 23.1(4), 23.1(4)"be," 23.1(6)"a"(2), 23.3(2)"c"(1), 23.4(12), 25.1(9), 25.1(10)"a," 25.1(12), 25.2, and 33.3(1).

Agency Contact: Christine Paulson

- **Summary of the Rule:** The proposed rules: 1) Add definitions and emissions inventory provisions to fulfill the requirements of greenhouse gas legislation (Senate File 485) approved by the Iowa General Assembly in 2008; 2) Update the definition of "volatile organic compound" or "VOC" because EPA removed a compound from the VOC list; 3) Correct errors and clarify the meaning for four construction permit exemptions; 4) Adopt by reference federal amendments to, and new standards for, 40 CFR Part 60, New Source Performance Standards (NSPS), 5) Adopt by reference federal amendments to 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPS); 6) Correct a calculation that specifies how to calculate emissions based on stack height; 7) Amend the fugitive dust rule to add "vehicle speed control" as a reasonable precaution to prevent the discharge of fugitive dusts beyond the property line; 8) Correct an error in the level of excess emissions allowed from incinerators during periods of operational breakdown or cleaning of control equipment; and 8) Update state rules for federally approved emissions testing methods.

Fill in this box if the impact meets these criteria:

☒ X No Fiscal Impact to the State.

☐ Fiscal Impact of less than \$100,000 annually or \$500,000 over 5 years.

☐ Fiscal Impact cannot be determined.

Brief Explanation:

Rule changes will not affect expenditures or revenues to the state.

Fill in the form below if the impact does not fit the criteria above:

☐ Fiscal Impact of \$100,000 annually or \$500,000 over 5 years.

* Fill in the rest of the Fiscal Impact Statement form.

Assumptions:

Describe how estimates were derived:

Estimated Impact to the State by Fiscal Year

	<u>Year 1 (FY ____)</u>	<u>Year 2 (FY ____)</u>
Revenue by Each Source:		
GENERAL FUND		
FEDERAL FUNDS		
Other (specify)		
<i>TOTAL REVENUE</i>	_____	_____
Expenditures:		
GENERAL FUND		
FEDERAL FUNDS		
Other (specify)		
	_____	_____

TOTAL EXPENDITURES

NET IMPACT

☒ This rule is required by State law or Federal mandate.

Please identify the state or federal law:

Clean Air Act sections 110, 111, and 112, as codified in 40 Code of Federal Regulations, Parts 52, 60, and 63. Also, Senate File 485: An Act Relating to Greenhouse Gas Emissions

☐ Funding has been provided for the rule change.

Please identify the amount provided and the funding source:

☒ Funding has not been provided for the rule.

Please explain how the agency will pay for the rule change:

The agency will not need additional revenue to implement this rule.

Fiscal impact to persons affected by the rule:

Greenhouse gases are emitted from a variety of sources. It is difficult to estimate the cost to businesses due to multiple factors. Businesses may also choose to complete the requirements with internal staff or hire technical consultants. It is estimated that construction permit applications will require an additional 30 minutes per unit to complete the potential greenhouse gas emissions; however, complex applications may require substantially more time. It is estimated that businesses will require an additional 4-8 hours to provide the greenhouse gas emissions inventory, depending on the number and type of sources.

The rest of the proposed rule changes will primarily affect regulated parties (industry) with applicable air emissions or emission equipment. The rule changes will provide a better description and updated references to existing federal regulations. Additionally, the proposed rule changes will clarify and correct existing state rules. This will provide a benefit to regulated parties in understanding how they could be potentially impacted by these rules.

Another impact of this rulemaking will be incorporation of the federal amendments to new source performance standards (NSPS) and emission standards for hazardous air pollutants (NESHAP). Owners and operators of affected air emissions sources are subject to the federal requirements whether the state incorporates these federal requirements into the Iowa Administrative Code or not. Therefore, the incorporation by reference of the federal standards will not impose any additional costs to the affected sources.

Fiscal impact to Counties or other Local Governments (required by Iowa Code 25B.6):

Greenhouse gas amendments only: The local air quality programs (Linn & Polk Counties) will have to establish and maintain a database of greenhouse gas emissions from proposed projects that will be used to generate reports upon Department request for the Iowa Climate Change Advisory Council. The costs estimates for these local programs is not known at this time.

* If additional explanation is needed, please attach extra pages.

Agency Representative preparing estimate: Christine Paulson
Telephone Number: 515 242-5154